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U.S. Application No. 10/568,599

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

Claims 1-26 (Cancelled)

27. (New) A raiser seat for assisting a person from a sitting to a standing position comprising:

a seat frame;

a seat adapted for movement relative to the seat frame between a lowered position and a raised position; and

a movement mechanism for moving the seat between the lowered and the raised positions;

wherein the movement mechanism comprises at least one cam and wherein the seat is supported by the at least one cam such that rotation of the at least one cam results in movement of the seat relative to the seat frame.

28. (New) The raiser seat of claim 27, wherein movement of the seat between the lowered and raised positions provides different lift patterns including combinations of lift and tilt simultaneously.

29. (New) The raiser seat of claim 27, wherein the at least one cam has a profile and the profile of the at least one cam is configured to determine a movement profile of the seat as it moves between the lowered and raised positions such that a combination of lift, tilt and cycle time of operation of the seat can be varied for a particular application.

30. (New) The raiser seat of claim 27, wherein the at least one cam has a profile and the seat is securely retained to the at least one cam to allow temporary breaks or permanent connection of the cam profile.

31. (New) The raiser seat of claim 27, wherein the seat rests on the at least one cam.

32. (New) The raiser seat according to claim 27, further comprising a seat unit, and wherein the seat is supported by the seat unit.

33. (New) The raiser seat according to claim 32, wherein the at least one cam is retained within the seat unit.

34. (New) The raiser seat according to claim 27, further comprising a motor for rotating the at least one cam, the motor driving the cam directly or indirectly.

35. (New) The raiser seat of claims 27, wherein the movement mechanism comprises a pair of coaxial cams.

36. (New) The raiser seat of claim 27, wherein the seat is secured on the at least one cam by an interface between a connection member of the cam and at least one guide track formed on the seat, and at least one protrusion/connection member is used to interface with the at least one guide track.

37. (New) The raiser seat according to claim 27, wherein the movement mechanism comprises at least one actuator fixed at a first end of the seat.

38. (New) The raiser seat according to claim 37, wherein the combination of the at

least one cam with the at least one actuator provides for part or all of the seat to translate substantially in a single direction.

39. (New). The raiser seat according to claim 32, wherein a second end of the seat is fixed to either the seat frame or the seat unit, and the second end of the seat is moveable relative to a first end in a generally vertical direction.

40. (New) The raiser seat according to claim 27, wherein the seat frame is mounted on wheels or sliders allowing movement of the seat from one location to another and allowing use of the seat as a wheelchair and further comprising a brake system.

41. (New) The raiser seat according to claim 40, wherein a brake system is associated with the movement mechanism, such that operation of the movement mechanism causes the brake system to act to prevent rotation of the wheels ensuring that when the movement mechanism is operated the brake system is automatically applied.

42. (New) The raiser seat according to claim 27, further comprising at least one single or double action pneumatic or hydraulic cylinder connecting the at least one cam and the seat, whereby, in the event that a load is placed on the seat such that it becomes detached from the at least one cam, a resistive load is placed on the seat's movement away from an edge of the at least one cam, the resistive load will continue to be applied until the seat moves sufficiently far that the pneumatic cylinder is extended to the limit of its stroke.

43. (New) The raiser seat of claim 27, wherein the at least one cam is pivotally mounted at one or more locations in the seat unit and the at least one cam rotates around the place(s) where it is pivotally mounted.

44. (New) The raiser seat according to claim 27, wherein the at least one cam is attached or integrated to a coaxial gear, in meshed engagement with a rack such that translation of the rack results in rotation of the at least one cam.

45. (New) The raiser seat of claim 44, wherein the rack is manufactured of flexible material which is applied to the thread section, which is made from a different material.

46. (New) The raiser seat of claim 27, wherein the movement mechanism is activated by a connection of a motor to a power source and an electrical control box, and wherein the control box, any sensory equipment and the power source are connected to the motor in the mechanism by any suitable means, either in close proximity to the movement mechanism, at a larger distance, or external to the seat unit wherein the raiser seat further comprising integrated sensors to influence the control box function and the instructions set given to the motor.

47. (New) The raiser seat of claim 27, comprising connections for electrical circuitry for power, sensors, control or other functions, the connections being encapsulated within the seat frame.

48. (New) The raiser seat of claim 27, comprising a backrest, wherein the backrest can tilt, either by its manufacture or through provision of a pivot point or via connection to a further pivoting joint component or assembly' from an appropriate flexible material and can be used to restrain the seat frame by association.

49. (New) The raiser seat of claim 27, wherein the seat unit includes means defining an aperture to allow its use as a commode.

50. (New) The raiser seat of claim 27, wherein each cam has an individual motor for its power source such that each of the cams can be precisely controlled and the seat can be tilted and rotated side to side.

51. (New) The raiser seat of claim 27, wherein the seat forms part of a seat unit which allows the seat to be permanently or removably attached to the seat frame, depending on the particular application, and the seat and/or seat unit can include means defining an aperture allowing the seat to then be used as a commode.

52. (New) The raiser seat according to claim 37, further comprising a seat unit, the seat being supported by the seat unit, and wherein a second end of the seat is fixed to either the seat frame or the seat unit, the second end of the seat being moveable relative to the first end in a generally vertical direction.

53. (New) The raiser seat of claim 32, wherein the seat unit comprises at least one reinforcing element.

54. (New) The raiser seat according to claim 27, wherein the at least one cam is connected to the seat in way which does not significantly alter the load on the movement mechanism by the use of a fixed connecting member or protrusion extending from the at least one cam which can be distributed at any point across the cam.

55. (New) The raiser seat of claim 36, wherein the connecting member can vary in length, dynamically or set at certain distances away from the cam to suit interactions with open or closed channels.

56. (New) The raiser seat of claim 55, wherein the connecting member is an extension of roller shafts of the cam.

57. (New) The raiser seat of claim 27, wherein the at least one cam has multiple rotation points.

58. (New) The raiser seat of claim 27, wherein the cam is a dual rotating split axes cam and is spring loaded.

59. (New) The raiser seat of claim 27, wherein an end section of the cam is used to mount further non-rotation cam sections to form a two or multipart rigid flexible cam.

60. (New) The raiser seat of claim 36, wherein the connecting member is engageable to provide two extra axes of movement.

61. (New) The raiser seat of claim 27, wherein protrusions are provided on the cam to allow location of an integrated roller, roller type and/or plain bearings, defining an effective overall profile of the cam and any integrated rollers and/or bearings.

62. (New) The raiser seat of claim 27, wherein the seat frame comprises handles located at any point on the seat frame to allow interaction with operators and users for accurate controlled movement and location with other components and assemblies.

63. (New) A raiser seat for assisting a person from a sitting to a standing position comprising:

a seat frame;

a seat adapted for movement relative to the seat frame between a lowered position and a raised position; and

a movement mechanism for moving the seat between the lowered and the raised positions;

wherein the movement mechanism comprises a first pair of coaxial cams and a second pair of coaxial cams and the seat is supported by the cams such that rotation of the cams results in movement of the seat relative to the seat frame;

wherein the movement between the lowered and raised positions defines a lift profile of the seat and the first pair of coaxial cams and the second pair of coaxial cams are arranged such that the lift profile of the seat can be varied almost infinitely;

wherein the seat forms part of a seat unit which allows the seat to be permanently or removably attached to the seat frame, depending on the particular application, and the seat and/or seat unit can include means defining an aperture allowing the seat to then be used as a commode.

64. (New) The raiser seat of claim 63, wherein the pair of cams have different stroke lengths in opposite directions and a single motor is used to power the pair of cams.

65. (New) The raiser seat of claim 63, wherein the seat unit is removably attached to the seat frame, which includes connections for electrical connectivity for power, sensors, control or other functions the connections being encapsulated within the seat frame.

66. (New) A raiser seat for assisting a person from a sitting to a standing position comprising:

a seat frame;

a seat adapted for movement relative to the seat frame between a lowered position and a raised position; and

a movement mechanism for moving the seat between the lowered and the raised

positions;

wherein the movement mechanism comprises at least one cam and wherein the seat is supported by the at least one cam such that rotation of the at least one cam results in movement of the seat relative to the seat frame;

wherein movement of the seat between the lowered and raised positions provides different lift patterns including combinations of lift and tilt simultaneously;

wherein the seat forms part of a seat unit which allows the seat to be permanently or removably attached to the seat frame, depending on the particular application, and the seat and/or seat unit can include means defining an aperture allowing the seat to then be used as a commode;

wherein the seat frame and/or the seat unit includes a removably attached soils receptacle, the soils receptacle having a disposable or permanent cover in part or in whole placeable over the seat, seat frame, backrest and seat unit.